REMARKS

Upon entry of the foregoing amendment, claims 1, 3, 4, 6-8 and 11-18 are pending in this application. Claims 5, 9 and 10 have previously been canceled. Claim 2 is newly canceled herein. Support for the amendments to claim 1 are found, for example, in original claim 2; pages 7-8; and elsewhere throughout the specification. Support for the amendments to claims 3, 11 and 18 are found, for example, in original claim 2 and elsewhere throughout the specification. The amendments made to claims 3, 11 and 18 were made to correct claim dependency in view of the cancellation of claim 2. It is believed no new matter has been added has been introduced by this amendment.

Restriction

Reconsideration and withdrawal of the requirement is respectfully requested. The Office Action restricted pending claims 1-14, 16-21, 24-37 into the following groups:

1. Group I, claims 1-3, drawn to a peptide.
2. Group II, claims 4, 6-8, 11, 12 and 14-16, drawn to a nucleic acid, expression cassette and method.
3. Group III, claim 13, drawn to a method of detecting a nucleic acid.
4. Group IV, claims 17 and 18, drawn to a method of treating infection in a patient by administering a peptide.

SEQ ID NO: 5 is said to be generic.

Applicants respectfully traverse the restriction requirement. The Office asserts the inventions listed as Groups I-IV do not relate to a single inventive concept under PCT Rule 13.1 because under PCT Rule 13.2, the groups lack the same or corresponding special technical features. In particular, the Office asserts that Group I lacks novelty under PCT Article 33(2) as being anticipated by Charlet *et al.* (Charlet *et al.*, JBC 271(36): 21808-21813 (1996)). The Office also asserts that a special technical feature is lacking within each of the identified groups and requires

an election of a single species for examination. In particular, the Office asserts the species are SEQ ID NOs: 1, 3 and 5-7.

Group I, claims 1 and 3 (newly amended herein), have been elected for examination with traverse. It is believed that all sequences as set forth in amended claim 1 are properly examined as a whole because the sequence (I) (SEQ ID NO: 5) is generic and represents the common technical feature linking the subject matter of all the pending claims.

While each of the identified protein sequences has a different structure, the identified protein sequence SEQ ID NO: 6 is an embodiment of the genus of sequences included in SEQ ID NO: 5. The Office has acknowledged SEQ ID NO: 5 is the special technical feature for purposes of unity.

The Office asserts that the claimed invention fails to make a contribution over the prior art in view of a Charlet document (Charlet *et al.*, JBC 271(36): 21808-21813 (1996)). However, the claims have been amended and as such the rejection is believed to be moot. The peptides disclosed by Charlet *et al.*, do not correspond to those encompassed by SEQ ID NO: 5.

In addition, Group II, claims 4, 6-8, 11, 12 and 14-16, drawn to a nucleic acid, expression cassette and method; Group III, claim 13, drawn to a method of detecting a nucleic acid; and, Group IV, claims 17 and 18, drawn to a method of treating infection in a patient by administering a peptide, are linked to Group I by the special technical feature of Group I – the amino acid (I) sequence (SEQ ID NO. 5). Therefore, since Groups II, III and IV share the common technical feature of the amino acid sequence of Group I, the additional groups should be examined along with the claims of Group I. Contrary to the position of the Office, the inventions listed as Groups I-IV are linked so as to form a single general inventive concept under PCT Rule 13.1, since the special technical feature, SEQ ID NO: 5, is patentable over the prior art, including Charlet *et al.*

It is respectfully requested that the claims of Groups II, II and IV be joined to, and examined with, the claims of Group I in view of the presence of the single general inventive concept. With respect to the election of species, SEQ ID NO: 6 is elected for purposes of initiating the search of generic SEQ ID NO: 5.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of times fees, or credit any overpayment to Deposit Account 50-0310.

This paragraph is intended to be a **CONSTRUCTIVE PETITION FOR EXTENSION OF TIME** in accordance with 37 C.F.R. § 1.136(a)(3).

Respectfully submitted,

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"Version with Markings to Show Changes Made"

Claim 2 has been canceled.

Claims 1, 3, 11 and 18 have been amended as follows:

1 (Amended). An isolated antimicrobial peptide, named myticin, [characterized in that it can be obtained] from a bivalve mollusk, [and in that its] having a molecular mass [is] of approximately 4.5 kDa; [its] a pI [is] of approximately 8.7; and [it comprises] 8 cysteine residues; wherein said peptide further comprises the following sequence [(I)]:

$HX_1HX_2CTSYX_3CX_4KFCGTAX_5CTX_6YX_7CRX_8LHX_9GKX_{10}CX_{11}CX_{12}HCSR$ (I)

in which: X_1 = P or S, X_2 = V or A, X_3 = Y or W, X_4 = S or G, X_5 = S or G, X_6 = R or H, X_7 = G or L, X_8 = N or V, X_9 = R or P, X_{10} = L or M, X_{11} = F or A, and X_{12} = L or V (SEQ ID NO: 5).

3 (Twice Amended). The peptide of claim [2]1, chosen from the group consisting of:

- a peptide comprising the following sequence (Ia):

HSHACTSYWCGKFCGTASCTHYLCRVLHPGKMCACVHCSR (Ia) (SEQ ID NO: 6)

- a peptide comprising the following sequence (Ib):

HPHVCTSYYCSKFCGTAGCTRYGCRNLHRGKLCFCLHCSR (Ib) (SEQ ID NO: 7).

11 (Amended). A nucleic acid comprising a sequence which encodes a peptide as claimed in claim [2] 1.

18 (Amended). A method of treating a bacterial, fungal or parasitic infection in a patient or animal comprising administration of an amount of the myticin antimicrobial peptide of claim [2] 1 effective to inhibit further growth of the infectious organism.